

MITIGATION MONITORING AND REPORTING PLAN

City of Fresno Fresno Clovis Wastewater Reclamation Facility Sludge Dewatering Facility Improvements

Biological Resources

BI-1 To mitigate for potential impacts on burrowing owls along the roadway to be widened and paved, the following actions shall be incorporated into the project specifications:

1. The road widening ground disturbance shall take place between September 1 and January 31 to avoid the nesting/fledging season.
2. A preconstruction survey, according to protocol (the Burrowing Owl Consortium, 1993), involving four (4) consecutive days of survey, shall be conducted by a qualified biologist hired by the City, to examine potential burrows on the roadway site for the existence of burrowing owl. The survey shall be conducted within 30 days prior to any construction activities within 250 feet of the roadway to be repaved. Results of the preconstruction survey shall be prepared in a letter and given to the California Department of Fish and Game (CDFG) for their review and approval prior to any construction activities at the roadway. The results of all surveys shall be submitted to CDFG for review and comments before commencing Project related activities.
3. If protocol surveys detect the presence of burrowing owl, all of the following mitigation measures shall be implemented, per the CDFG 1995 guidelines, "Staff Report on Burrowing Owl Mitigation."
 - a. Avoid active burrows by at least 250 feet during the nesting season (February 1 through August 31). Destroy burrows during the non-nesting season (September 1 through January 31) after owls are passively relocated (see d. below)
 - b. Offset the loss of foraging and burrow habitat by acquiring and permanently protecting an appropriate amount of land (consult with CDFG) at a location adjacent to occupied habitat and acceptable to the Department.
 - c. Offset destruction of occupied burrows by enhancing existing unsuitable burrows or creating new artificial burrows at a ratio of 2:1 on the projected land from b.
 - d. Passively relocate owls, if they must be moved. Allow one or more weeks to allow the owls to acclimate to alternative burrows.
 - e. Provide funding for long-term management and monitoring of the protected land. The monitoring plan should include success criteria, remedial measures, and an annual report to the CDFG.

Impact:	Potential effect on burrowing owl burrow and owl, if present, along the roadway repaving element
Party Responsible for Implementation:	City and Contractor
Agency Responsible for Monitoring:	City
Monitoring Method:	City will hire biologist to implement CDFG requirements listed above.
Documentation of Compliance:	Date: _____ Initial: _____

Cultural Resources

CUL-1: The Project specifications shall state that if previously unidentified and potentially significant archaeological resources (e.g., stone artifacts, dark ashy soils or burned rocks, or old glass, metal, or ceramic artifacts) become apparent during ground disturbances, work in that location shall be diverted and a qualified archaeologist shall be contacted immediately to evaluate the nature and significance of the find.

Impact:	Unknown archaeological resources could be encountered during construction
Party Responsible for Implementation:	City and Contractor
Agency Responsible for Monitoring:	City
Monitoring Method:	Evaluation of find(s) by a qualified archeologist hired by City
Documentation of Compliance:	Date: _____ Initial: _____

CUL-2: Before construction-related earthmoving activities and excavation at depths of 2 feet below the surface (into the Modesto Formation), the services of a qualified Principal Paleontologist shall be retained and consulted.

Impact:	Unknown paleontological resources could be encountered during excavation of the silo site below 3 feet bgs
Party Responsible for Implementation:	City
Agency Responsible for Monitoring:	City
Monitoring Method:	Paleontologist report of silo site monitoring
Documentation of Compliance:	Date: _____ Initial: _____

CUL-3: Consistent with Federal and State law, if fossils are discovered during excavation of the silo site, an approved Principal Paleontologist shall be called to the site to develop mitigation measures to protect those resources. The Paleontologist shall determine when and where monitoring will be required, and who will conduct it.

The Paleontologist shall coordinate with appropriate construction contractor personnel to provide information regarding applicable requirements concerning protecting paleontological resources. Contractor personnel, particularly heavy-equipment operators, shall also be briefed on procedures to be followed in the event that fossil remains and a currently unrecorded fossil site are encountered by earthmoving activities if a paleontological construction monitor is not on the site. Additional briefing shall be presented to new contractor personnel as necessary. Names

and telephone numbers of the monitor and other appropriate mitigation program personnel shall be provided to appropriate contractor personnel.

When required, monitoring shall consist of visually inspecting freshly exposed cuts into the Modesto Formation, and spoil piles for the discovery and recovery of larger fossil remains, and periodically dry test screening to allow for the discovery and recovery of smaller fossil remains. If larger vertebrate fossils are noted by construction workers or monitors, excavation there will cease, and the monitor will be notified. The monitors will then notify the Principal Paleontologist.

The monitor and recovery staff will salvage any larger vertebrate fossil remains, as soon as practicable and as quickly as possible, under the supervision of the Principal Paleontologist following Society of Vertebrate Paleontology (1995) and State (Caltrans, 2007) guidelines. The monitor shall document the location and proper geologic context of any recovered fossil occurrence or rock or sediment samples. Any recovered rock or sediment sample from the Modesto Formation shall be processed to allow for the recovery of smaller fossil remains that normally are too small to be observed by the monitor. Pursuant to Society of Vertebrate Paleontology (1995) standard measures, no more than 6,000 pounds (12,000 pounds total) of sediment need be processed from the Modesto Formation.

If the Paleontologist or monitor determines that the fossil site is too unproductive or the fossil remains not worthy of recovery by the monitor, no further action will be taken to preserve the fossil site or remains, and earthmoving activities shall be allowed to proceed through the site immediately.

All fossil specimens recovered from the Project site as a result of mitigation, including those recovered as the result of processing rock or sediment samples, will be treated (i.e., prepared, identified, curated, catalogued) in accordance with designated museum repository requirements. Rock or sediment samples will be submitted to commercial laboratories for microfossil, pollen, radiometric dating, or other analysis, as appropriate.

The monitor shall maintain daily monitoring logs that include the particular tasks accomplished, the earthmoving activity monitored, the location where monitoring was conducted, the rock unit(s) encountered, the fossil specimens recovered, and associated specimen data and corresponding geologic and geographic site data. A final technical report of results and findings shall be prepared by the Paleontologist in accordance with any City requirement and archived at a repository mutually approved by the City and Paleontologist.

Impact:	Unknown paleontological resources could be encountered during construction of the silo
Party Responsible for Implementation:	City
Agency Responsible for Monitoring:	City
Monitoring Method:	Identification of find(s) by a qualified paleontologist
Documentation of Compliance:	Date: _____ Initial: _____

CUL-4: If human remains are uncovered, or in any other case when human remains are discovered during construction, the Fresno County Coroner shall be notified to arrange their proper treatment and disposition. If the remains are identified—on the basis of archaeological context, age, cultural associations, or biological traits—as those of a Native American, California Health and Safety Code 7050.5 and Public Resource Code 5097.98 require that the Coroner notify the NAHC within 24 hours of discovery. The NAHC will then identify the Most Likely Descendent who will determine the manner in which the remains are treated.

Impact:	Unknown human remains could be encountered during construction
Party Responsible for Implementation:	City
Agency Responsible for Monitoring:	City
Monitoring Method:	On site inspection during construction
Documentation of Compliance:	Date: _____ Initial: _____